

Claims

1. A wooden composite beam having a central cavity surrounded by wood or wood derivative walls and filled with a core of corrugated paper or corrugated cardboard, the core being
5 adhered to the surrounding walls.
2. A beam as claimed in Claim 1 wherein the beam is an I beam comprising upper and lower plywood flanges interconnected by a web comprising a pair of spaced apart planar side walls
10 formed from wood or wood derivative material, the cavity being formed within the web.
3. A beam as claimed in Claim 2 wherein each plywood flange extends beyond the supporting web on each side thereof by
15 about 1/3 of its total width.
4. A beam as claimed in Claim 2 wherein the side walls are made from one of hardboard, plywood, or cardboard.
- 20 5. A beam as claimed in Claim 2, wherein the side walls are formed from a lesser thickness material than the material of the flanges.
6. A beam as claimed in Claim 2, wherein the core comprises
25 a plurality of layers of corrugated paper or cardboard which

are each coated in a suitable adhesive and laminated together.

7. A beam as claimed in Claim 6, wherein the corrugations in
5 the different layers of the core all run in the same direction.

8. A beam as claimed in Claim 6, wherein the corrugations in adjacent layers of the core are normal to each other.

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9. A beam as claimed in Claim 6, wherein the corrugations in one layer may be smaller in dimensions than the corrugations in an adjacent layer.

15 10. A beam as claimed in Claim 2, wherein the wood grain in the outer veneer of the plywood flanges extends longitudinally of the beam.

11. A beam as claimed in Claim 3, wherein the transverse width
20 of the cavity within the web is between 20-35% of the width of the flanges and typically 25-35%.

12. A beam as claimed in Claim 2 and further including a plurality of dowels mounted on the web and spaced
25 longitudinally along its length.

13. A building panel having a rectangular frame with both
faces covered in board material, the frame comprising top and
bottom rails which are joined together by a plurality of
spaced apart wood composite "I" beams as claimed in Claim 2
5 extending therebetween.

14 A building panel having a rectangular frame with both
faces covered in board material, the frame comprising top and
bottom rails which are joined together by a plurality of
10 spaced apart wood composite beams extending therebetween, the
outer beams being beams in accordance with Claim 12.

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